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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,688	06/29/2001	Sang Kap Park	K-299	4954

34610 7590 03/24/2004

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EXAMINER

GODDARD, BRIAN D

ART UNIT	PAPER NUMBER
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2171

DATE MAILED: 03/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/893,688

Applicant(s)

PARK ET AL.

Examiner

Brian Goddard

Art Unit

2171

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 7-36, 39-42 and 45-58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 7, the phrase "such as" (line 6) renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

In the interest of compact prosecution, the examiner ignores the limitation following this indefinite phrase. Specifically, the examiner ignores "such as on-line message receiving space assigned to the corresponding technician."

Claim 8 recites the limitation "the customer relationship management system" in the first line (preamble) of the claim. There is insufficient antecedent basis for this limitation in the claim. Claims 9-36 are each dependent upon claim 8, and are therefore indefinite for the same reason.

Claim 39 recites the same limitation as claim 8, also having insufficient antecedent basis in the claim. Claims 40-42 are each dependent upon claim 39, and are therefore indefinite for the same reason.

Claim 45 recites the same limitation as claim 8, lacking sufficient antecedent basis for this limitation in the claim as well. Claims 46-58 are each dependent upon claim 45, and are therefore indefinite for the same reason.

In the interest of compact prosecution, the examiner assumes that "the" should be changed to 'a' in each of these limitations of claims 8, 39 and 45.

Claim 24 recites the limitation "the above process" in the final line of the claim. There is insufficient antecedent basis for this limitation in the claim.

In the interest of compact prosecution, the examiner ignores the limitation, "confirmed through the above process" entirely.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,943,652 to Sisley et al. in view of U.S. Patent No. 6,389,400 to Bushey et al.

Referring to claim 1, Sisley discloses a customer relationship management system as claimed. See Figures 1-6 and the corresponding portions of Sisley's specification for this disclosure. Sisley teaches a customer relationship management system [See Figs. 1-2] comprising:

a database [SMS database (not numbered; See column 6, line 25 et seq.)] for storing various kinds of sensitivity information [e.g. technician preference, priority/urgency of request, etc.] classified by customers and encoded, behavior pattern information [assignment attributes: e.g. commitment stress value, primary technician stress value, territory stress value, etc. (See column 17, line 25 – column 19, line 16)] determined in correspondence with the encoded sensitivity classification, and information on service request particulars [service call attributes 30]; and

an information collection system [12] for collecting information according to the service request particulars or satisfaction/dissatisfaction with the service from respective customers [See Figs. 1-2 & corresponding portions of specification], and for selectively

transferring the information stored in the database to terminals [18] of respective technicians [See Fig. 1].

Sisley does not explicitly state that the information collection system [12] is a server network constructed to include an information collection server and a separate information transfer server as claimed. However, Sisley provides for an open-ended physical implementation of the system in accordance with Figure 1.

Bushey discloses a system and method similar to that of Sisley, wherein the information collection system is implemented as a server network [See Fig. 6 & corresponding portion of specification] constructed to include an information collection server [14] and a separate information transfer server [16] as claimed. More specifically, Bushey's information collection server [14] collects information [customer model] according to service request particulars or satisfaction/dissatisfaction with a service from respective customers [2] as claimed, while Bushey's information transfer server [16] selectively transfers the information [customer model] stored in a database [6] to terminals of respective technicians [agents 8] as claimed.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement Sisley's system 12 on Bushey's server network to obtain the invention as claimed. One would have been motivated to do so in order to replace the vague physical implementation provided by Sisley (having only a single processor) with an efficient, distributed implementation with greater balance of processing load to multiple processors as provided by Bushey.

Referring to claim 2, the system and method of Sisley in view of Bushey as applied to claim 1 above discloses the invention as claimed. See Figures 1-2 & 9-10 and the corresponding portions of Sisley's specification for this disclosure. Sisley's (as modified by Bushey) database stores introduction information of the respective technicians [e.g. skills and territory (See Technician attribute set 28)] and information on a serviceable time [calendar/schedule (See Technician attribute set 28)], while the server network [See above] further includes a service progress confirming server [Sisley: Assigner 22 (in conjunction with the modification above)] for updating a current progress state [Sisley: field event data and call status] by continuously confirming the current progress state of the respective technician [Sisley: See column 5, line 64 – column 6, line 67] as claimed.

Referring to claim 3, the system and method of Sisley in view of Bushey as applied to claim 1 above discloses the invention as claimed. See Figures 1-4 and the corresponding portions of Sisley's specification for this disclosure. Sisley (as modified by Bushey) teaches the system of claim 1, as above, wherein the server network [See above] further includes an information extraction server [Sisley: Assigner 22 (in conjunction with the modification above)] for extracting information on a specified technician proper for the customer's service request particulars [with skills matching the needs of the service request] among the information on the respective technicians [28] stored in the database based on the customer's service request particulars [Sisley: See column 9, lines 20-34], and providing the information on the specified technician to the customer [See Figs. 1-2] as claimed.

Referring to claim 4, the system and method of Sisley in view of Bushey as applied to claim 1 above discloses the invention as claimed. See Figures 1-2 and the corresponding portions of Sisley's specification for this disclosure. Sisley (as modified by Bushey) teaches the system of claim 1, wherein the server network [See above] further includes a service performance confirming server [Sisley: Assigner 22 (in conjunction with the modification above)] for receiving particulars of service performance completion [call completion time, call duration, and call status attributes] from the technician's terminal, and registering the particulars of service performance completion in the database [See columns 5-6] as claimed.

Referring to claim 5, the system and method of Sisley in view of Bushey as applied to claim 1 above discloses the invention as claimed. Sisley v. Bushey as applied to claim 1 does not explicitly transfer a message for confirming the service satisfaction to the terminal of a specified customer if service providing to the specified customer is completed as claimed. That is, Sisley's method does not explicitly include this confirmation step. However, Bushey's system does include the claimed message transfer server [16] for transferring a message [survey] for confirming the service satisfaction to the terminal of a specified customer [2] upon completion of the requested service [See column 11, lines 25-30] as claimed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Bushey's service satisfaction confirmation step to the system and method of Sisley v. Bushey above to obtain the invention as claimed. One would have been motivated to do so in order to

provide a means of gauging customer satisfaction with the provided service for enhancing customer service during future calls, as provided by Bushey.

Referring to claim 6, the system and method of Sisley in view of Bushey as applied to claim 5 above discloses the invention as claimed. See Figure 6 and the corresponding portion of Bushey's specification, as well as column 3, lines 1-5, for the details of this disclosure. Sisley v. Bushey teaches the system of claim 5, as above, wherein the message transfer server [16] transfers the message prepared as an e-mail or performs a message service in a mobile communication network [See column 3, lines 1-5 and column 9, lines 39-49] as claimed.

Referring to claim 7, the system and method of Sisley in view of Bushey as applied to claim 1 above discloses the invention as claimed. See Figure 1 and the corresponding portion of Sisley's specification, as well as Figure 6 and the corresponding portion of Bushey's specification, for the details of this disclosure. Sisley v. Bushey teaches the system of claim 1, as above, wherein the terminal of the technician [Sisley: 18; Bushey: 8] is a individual personal computer or portable wire/radio phone, which can receive information from the information transfer server [Bushey: 16; Sisley: 12 (See above)] through various kinds of communication networks [Bushey: See Fig. 6], or search and register the service-related information by directly accessing the information transfer server [See above] as claimed.

Referring to claim 8, the system and method of Sisley in view of Bushey as applied to claim 1 above discloses the invention as claimed. See the discussions regarding claims 1-7 above and the cited portions of the specifications for the details of

this disclosure. Sisley v. Bushey teaches a method of operating a customer relationship management system comprising:

a first operation step of a server network confirming...[See claim 1 above];

a second operation step of the server network obtaining reception information for a classified type [Bushey: customer behavioral model] corresponding to the confirmed sensitivity of the customer;

a third step of the server network receiving the service request...[See claim 1 above]; and

a fourth step of the server network registering the information requested by the customer in a database [See claim 1 above] as claimed.

Referring to claim 9, the system and method of Sisley in view of Bushey as applied to claim 8 above discloses the invention as claimed. See Figures 1-2 and the corresponding portions of Sisley's specification, as well as Figure 6 and the corresponding portion of Bushey's specification, for this disclosure. The customer's sensitivity is directly confirmed by a receptionist [Sisley: See column 1, lines 44-59 & Fig. 1]...as claimed.

Referring to claim 10, the system and method of Sisley in view of Bushey as applied to claim 8 above discloses the invention as claimed. The customer's sensitivity is confirmed by comparing used words transferred during the customer's service request with predetermined reference particulars of sensitivity classification as claimed. See the discussion regarding claim 1 above, as well as Figures 1-4 and the corresponding portions of Bushey's specification, for the details of this disclosure.

Referring to claims 11-14, the system and method of Sisley in view of Bushey as applied to claim 8 above discloses the invention as claimed. See Figure 1 and the corresponding portion of Sisley's specification, and Figures 3-4 and the corresponding portions of Bushey's specification, for this disclosure. Sisley v. Bushey teaches the method of classifying the customer's sensitivity as claimed.

Referring to claim 15, the system and method of Sisley in view of Bushey as applied to claim 8 above discloses the invention as claimed. See Figures 1-4 and the corresponding portions of Sisley's specification for this disclosure. Sisley v. Bushey teaches the method of claim 8, as above, further comprising the steps of:

confirming an area where the customer is positioned ['location of the machine'] and time zone for providing the requested service ['initiation time' and 'expiration time'];

obtaining schedule information [technician calendar] of technicians in charge of a service field [technician skill set] requested by the customer among respective technicians who are allocated with the corresponding area [technician service territory] as their service providing area;

extracting information on the technicians who are not pressed [have low stress value for the request] in the time zone when the customer wants to receive the service based on the obtained information [See Figs. 2-4 & corresponding portions of specification];

displaying the extracted information...[See claim 3 above and column 10, lines 44-49]; and

registering in the database...[See above] as claimed.

Claims 16-17 are rejected on the same basis as claim 4, in light of the basis for claim 8 above. See the discussions regarding claims 1, 4 and 8 above for the details of this disclosure.

Claim 18 is rejected on the same basis as claim 7, in light of the basis for claim 17 above. See the discussions regarding claims 1, 4, 7-9 and 17 above for the details of this disclosure.

Referring to claims 19 and 20, the system and method of Sisley in view of Bushey as applied to claim 17 above discloses the invention as claimed. In particular, the customer is informed of the scheduled visit in advance as claimed. See Figures 1-4 and the corresponding portions of Sisley's specification for this disclosure.

Referring to claims 21-23, the system and method of Sisley in view of Bushey as applied to claim 17 above discloses the invention as claimed. See the discussions regarding claims 4-5 above, and the cited portions of the specifications therein, for the details of this disclosure.

Claims 24-26 are rejected on the same basis as claim 5, in light of the basis for claim 8. See the discussions regarding claims 1, 5 and 8 above, and the cited portions of the specifications therein, for the details of this disclosure.

Claims 27-29 are rejected on the same basis as claim 6, in light of the basis for claim 25. See the discussions regarding claims 1, 5-6, 8 and 24-25 above, and the cited portions of the specifications therein, for the details of this disclosure.

Referring to claims 30-36, the system and method of Sisley in view of Bushey as applied to claim 25 above discloses the invention as claimed. Bushey's customer

satisfaction confirming survey steps, as applied to the modified system of Sisley above, performs the confirming as claimed. See Figures 1-8 and the corresponding portions of Bushey's specification for this disclosure.

Claims 37 and 38 are rejected on the same basis as claims 2 and 3 respectively. See the discussions regarding claims 1-3 above for the details of this disclosure.

Claim 39 is rejected on the same basis as claim 15. See the discussions regarding claims 1, 8 and 15 above for the details of this disclosure.

Claim 40 is rejected on the same basis as claim 2, in light of the basis for claim 39 above. See the discussions regarding claims 1-2, 8 and 15 above for the details of this disclosure.

Referring to claims 41 and 42, the system and method of Sisley in view of Bushey as applied to claim 39 above discloses the invention as claimed. See Figures 1-2 and the corresponding portions of Sisley's specification for this disclosure. Sisley's (as modified by Bushey) assigner/scheduler system updates the reservation [assignment] information and the technician schedule [calendar] information as claimed.

Claim 43 is rejected on the same basis as claims 4 and 5. See the discussions regarding claims 1, 4 and 5 above for the details of this disclosure.

Claim 44 is rejected on the same basis as claim 6, in light of the basis for claim 43 above. See the discussions regarding claims 1 and 4-6 for the details of this disclosure.

Claim 45 is rejected on the same basis as claims 5 and 25 above. See the discussions regarding claims 1, 5 and 25 above for the details of this disclosure.

Claim 46 is rejected on the same basis as claim 6, in light of the basis for claim 45. See the discussions regarding claims 1, 5-6, 25 and 45 above for the details of this disclosure.

Claims 47, 48, 49 and 50 are rejected on the same basis as claims 26, 28, 29 and 27 respectively, in light of the basis for claim 46 above. See the discussions regarding claims 1, 5-6, 25-29 and 45-46 above for the details of this disclosure.

Claims 51-56 are rejected on the same basis as claims 30-35 respectively, in light of the basis for claim 45 above. See the discussions regarding claims 30-35 above for the details of this disclosure.

Referring to claim 57, the system and method of Sisley in view of Bushey as applied to claim 45 above discloses the invention as claimed. See Figures 1-3 and the corresponding portions of Sisley's specification, as well as Figures 1-4 and the corresponding portions of Bushey's specification, for the details of this disclosure. Sisley v. Bushey distinguishes between new and registered users as claimed. Refer specifically to Figures 1-4 of Bushey's specification for this disclosure.

Claim 58 is rejected on the same basis as claim 36, in light of the basis for claim 45 above. See the discussions regarding claims 1, 8, 25, 36 and 45 above for the details of this disclosure.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent Nos. 5,956,024 to Strickland et al. ; 6,430,496 to Smith et al.; and 6,327,574 to Kramer et al. are each considered particularly pertinent to applicants' claimed invention.

The remaining prior art of record is considered pertinent to applicants' disclosure, and/or portions of applicants' claimed invention.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Goddard whose telephone number is 703-305-7821. The examiner can normally be reached on M-F, 9 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

bdg  
17 March 2004

  
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